

**Communications - Electronics**

**RADIOTELEPHONE PROCEDURES**

This regulation provides guidance for radio operators in the Civil Air Patrol (CAP). It is intended where formal written message handling is required.

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## CHAPTER 1 GENERAL INFORMATION

**1-1. Standardization.** The possession of a radio operator authorization does not make a radio operator. The skills required for excellence in on-the-air ability are learned by reading, listening, practice, and adherence to procedures. The operator then polishes his/her skills with experience under all operating conditions. The radiotelephone procedures in this regulation are to be used in CAP net operations. While these procedures are encouraged in all CAP communications, some leeway must be given to communications users (ground teams, aircrews, flight line, special activities, etc.) who use radios as tools in the accomplishment of their assigned duty. These procedures are based on the appropriate USAF instructions, as well as appropriate Allied Communications Publications (ACPs). As the USAF auxiliary, CAP operates on military frequencies controlled by the USAF. For this reason and others, CAP communications are based on ACP-125, as well as applicable AF publications. Non-standard procedures may create interference and confusion, reduce reliability, and tend to nullify the communications effectiveness. Each radio operator must exercise good common sense and courtesy when faced with a situation not covered in this regulation.

**1-2. Proper Expression.** Expressing yourself properly on CAP frequencies is very important. Proper expression involves a working familiarity with the phonetic alphabet, authorized prowords, and the proper enunciation of numerals.

**a.** The International Civil Aviation Organization (ICAO) alphabet, listed at Attachment 1, is used by the US military. For purposes of standardization, CAP is required to use this phonetic alphabet.

**b.** The prowords, listed at Attachment 2, are primarily used in directed nets. They are tools for the operator. Using prowords with specific meanings reduces confusion and aid in the efficiency of the net.

**c.** When part of a message, or anytime the band conditions are poor, numerals will be pronounced as listed at Attachment 3. Messages will frequently contain numbers to give an address, amount, weight, etc. They will be spoken digit by digit (except numerals ending in even thousands or hundreds) and will be preceded by one of the prowords:

(1) **NUMBER** is used to give the serial number or message number of a message.

(2) **TIME** is always followed by the Date-Time-Group (DTG).

(3) **GROUPS** always precede the group count for the text of a message when the group count is used.

(4) **ZIP** always precedes a zip code. Numbers less than five digits, or greater than five and less than nine digits (Zip + 4), should be considered an error and a correction should be requested.

(5) **FIGURES** are used in all other instances involving numbers.

**d. Punctuation.** A single punctuation mark may have several words or pronunciations. For example, an operator may say, "period," "decimal," "dot," etc., for the same punctuation mark. To avoid confusion, punctuation should always follow the table listed at Attachment 4.

**e. Radio Checks, Signal Strength, and Readability.** A station is understood to have a good signal strength and readability unless otherwise notified. Strength of signals and readability will not be exchanged unless one station can not clearly hear the other. A station wishing to inform another of the signal strength and readability will do so by means of a short, concise report of actual reception, such as "WEAK BUT READABLE," "LOUD AND CLEAR," "LOUD BUT DISTORTED," "WEAK WITH INTERFERENCE," etc. Reports such as "FOUR BY FOUR," "FIVE BY FIVE," "20 OVER S9," etc., will not be used to indicate strength and quality. The list of standard prowords to be used for the report of signal strength and readability are listed at Attachment 5.

**1-3 Maintaining Records.** All formal messages should be recorded. CAP radio stations must keep a file of all messages handled for a minimum period of 30 days. After 30 days, the recorded copy may be destroyed unless otherwise instructed by NHQ CAP or your region or wing CAP.

**a. Message File.** A simple message file consists of three manila folders, labeled "RECEIVED," "SENT," and "TO BE SENT."

**b. Station Log.** A separate log, CAPF 110, *Air/Ground or Point to Point Log*, for CAP operations (if required) must be retained for a minimum period of 30 days, unless otherwise instructed by NHQ CAP or your region or wing CAP.

**1-4. Prohibited Operating Practices.** The following prohibited operating practices apply to operation of all CAP stations:

- a.** Violation of radio silence.
- b.** Personal conversation of any type.
- c.** Use of given names or nicknames in place of authorized call signs.
- d.** Excessive tuning and testing.
- e.** Profane, indecent, or obscene language.
- f.** Use of excessive transmitter power output.
- g.** Interruption of scheduled net activities in progress.
- h.** Transmitting in a directed net without permission of the Net Control Station (NCS).
- i.** Leaving a directed net without the permission of the NCS, except in emergency situations or equipment failure.

## CHAPTER 2 RADIOTELEPHONE PROCEDURES

**2-1 Nets.** The type of net and method of operation is determined by operational factors. There are two types of CAP military nets.

**a.** In a **Directed Net**, stations must obtain permission from the Net Control Station (NCS) prior to communicating with other stations. CAP nets will be directed unless otherwise stated by the NCS.

**b.** In a **Free Net**, the NCS authorizes stations to transmit traffic to other stations without obtaining prior permission. A free net operation does not relieve the NCS of the responsibility for maintaining circuit discipline.

**2-2. Calling.** There are four types of calls most commonly used in CAP operations.

**a. Abbreviated Call.** The abbreviated call is the most commonly used. It starts with "THIS IS your call sign, OVER." (Example - "THIS IS SANDLAPPER FOWER THU-REE, OVER.") It is incorrect to say "NET CONTROL, THIS IS \_\_\_\_." This call is used in an active net or to answer a full or formal call.

**b. Full or Formal Call.** The full or formal call starts with the call sign of the station being called, followed by the prowords "THIS IS," and then the call sign of the station and the proword "OVER." (Example "SANDLAPPER FOWER THU-REE THIS IS MOCKINGBIRD WON WON, OVER.")

**c. Collective Call.** The collective call is normally used by those who act as net control or alternate net control stations. The collective call assists the NCS in calling groups of stations and the proword "OVER." (Example - "NATIONAL COMMAND NET, THIS IS HEADCAP TWO TWO... OVER.")

**d. Multiple Call.** The multiple call is employed when a calling station has subject matter to bring to the attention of more than one station. (Example - "SANDLAPPER FOWER THU-REE, MOCKINGBIRD WON WON, MIDDLE EAST FOWER FIFE, THIS IS HEADCAP TWO TWO, OVER.")

**e. Nothing Heard.** After a station is called twice with no response, the station calling ends the call with, "NOTHING HEARD, THIS IS \_\_\_\_ OUT." This tells other stations monitoring that the channel or frequency is no longer in use. The calling station should refrain from calling the same station for at least 5 minutes after clearing from the first call.

### 2-3 Voice Call Signs.

**a.** Within CAP, each region and wing is assigned a unit tactical call sign. The tactical call sign plus a serially assigned number comprise the complete CAP tactical call sign. Serially assigned numbers will not exceed four digits.

**b.** Tactical call signs one through five in each region/wing will change with changes in staffing. Assignments of tactical unit call signs one through five for region/wing are as follows:

- (1) Region/wing commander
- (2) Region/wing vice commander
- (3) Region/wing chief of staff
- (4) Region/wing director of communications
- (5) Region/wing chaplain

**c.** During actual/practice search and rescue missions and special events, temporary functional call signs may be assigned. The wing DC, the incident commander, or the special events commander have the authority to use these options:

(1) Line of sight LMR nets may use functional call signs without a location prefix. Examples are "Air Ops," "Flight Line," "Comm," "Command 1," "Command 2," "Flight 1," "Flight 2," "Admin," "Pipeline," "Transport," "Survey," etc. (The use of digits with a call sign is optional.)

(2) HF systems must use a geographical name for the station or location. An example is "MONTGOMERY CAP MISSION BASE."

(3) Aircraft control facilities are identified by using the base, location, and service required (for example, "CAP Control," "CAP Mission Base," "New York RADIO" (as in aeronautical station), etc. CAP ground stations communicating with an aircraft could use "MONTGOMERY CAP MISSION BASE."

**d. Aircraft Call Signs.** CAP corporate aircraft will use "CAPFlight" (pronounced "capflight") at all times. Member-owned aircraft may also use the CAPFlight call sign when on reimbursable missions. Wings and regions will use an assigned one or two digit number, listed at Attachment 6, as the first two digits of the call sign and will devise a suitable plan for assigning the second two digits. Controls must be present in this plan to prevent two aircraft from using the same call sign simultaneously. No truncating of the call sign numbering is authorized.

(1) **Flight Plans.** The three letter identifier "CPF" is used within the FAA computer system in place of the spoken word "CAPFlight." For this reason, "CPF\_\_\_\_\_" will be used in place of the aircraft tail number on flight plans. In the remarks section, the voice identifier "CAPFlight \_\_\_\_\_" must be included as well as the tail number of the aircraft.

(2) **Exceptions.** Wing or region commanders may approve the aircraft tail number as a call sign when a "customer" has specifically requested it. This could apply to some missions conducted for Customs or DEA. Additionally, aircraft using **functional call signs**, such as "Highbird" are not authorized to use that call sign on aviation frequencies unless approved by the FAA prior to the flight.

**e. Search and Rescue Units (SRU) Call Signs.** Any aircraft of the armed forces, CAP or Coast Guard auxiliaries, should insert the word "RESCUE" in their normal call sign any time they are engaged in an "actual" SAR mission.

This is of particular importance when the aircraft are operating in a SAR airspace reservation. This will identify them as being authorized to be in the area, and will avoid having violations filed against them for unauthorized entry. The use of the word "Rescue" in an aircraft's call sign when it is not engaged in a SAR

operation is prohibited. For example, the following aircraft would be assumed to be conducting some form of SAR operation: "Army Rescue 1234," "Air Force Rescue 6899," "Coast Guard Rescue 5432," "Bonanza Rescue 23," and "Navy Rescue 67899." Civil Air Patrol should identify its aircraft as "CAPFlight Rescue 1234."

## CHAPTER 3 NET OPERATING PROCEDURES

**3-1. General.** It is the intent of this regulation to make net procedures uniform so that every member will understand the proper manner of transmitting and receiving messages, and conducting themselves on CAP nets.

**3-2. Message Format.** The CAP message format does not require a specific CAP form, but the CAPF 105, *Civil Air Patrol Message Form*, assists the operator or originator in creating a message in the correct CAP format. The standard CAP format consists of several parts.

**a. Precedence Designators.** The precedence assigned to a message is the responsibility of the originator of the message. The originator must weigh subject matter and the time factor involved when making the decision of a precedence. By assigning a precedence, the originator tells handling operators in what order the message should be handled and denotes the urgency of the information to the addressee(s). Dual Precedence: If a message has both action and information addressees, it may be either single or dual precedence. A single precedence indicates that the message is of the same urgency to all addressees. If the message is more urgent to one addressee than another, it will be so indicated by the assignment of two precedences. The higher precedence represents the action addressee(s) and the lower precedence represents the information addressee(s). The higher precedence is always assigned ahead of the lower precedence in the heading. No message may be assigned more than two precedences. The precedence designators, in order of importance, are:

**(1) FLASH (Z).** This precedence is reserved for initial enemy contact messages or operational combat messages of extreme urgency. Brevity is mandatory. FLASH messages are to be handled as fast as humanly possible, ahead of all other messages, with in-station handling time not to exceed 10 minutes. Messages of lower precedence are interrupted on all circuits involved until the handling of FLASH messages are completed. FLASH messages are never used in CAP originated messages, but may be received from another agency for relay.

**(2) IMMEDIATE (O).** This precedence is reserved for messages relating to situations gravely affecting the security of the nation. It requires immediate delivery. Examples include reports of widespread civil disturbance, reports or warning of grave natural disaster, and requests for or directions concerning search and rescue operations. Immediate messages are processed,

transmitted, and delivered in the order received and ahead of all messages of lower precedence. They are to be handled as quickly as possible, with in-station handling time not to exceed 60 minutes. Messages of lower precedence should be interrupted on all circuits involved until the handling of the IMMEDIATE message is completed.

**(3) PRIORITY (P).** This precedence is reserved for traffic requiring expeditious action by the addressee or for conducting operations in progress when ROUTINE precedence will not suffice. PRIORITY precedence messages are processed, transmitted, and delivered in the order received and ahead of all messages of ROUTINE precedence. Examples include requests for supplies or equipment during the conduct of an operation, time-critical items requiring quick response, and situation reports. They are to be handled as quickly as possible, with in-station handling time not to exceed 6 hours.

**(4) ROUTINE (R).** This precedence is used for all types of message traffic justifying transmission by rapid means, but not of sufficient urgency to require higher precedence. ROUTINE precedence messages are delivered in the order received and after all messages of higher precedence. ROUTINE is the most used precedence designator in CAP messages. Examples include any message that requires the documentation of its transmission and/or delivery; messages concerning normal operations, programs, or projects; and periodic or consolidated reports. They should be handled as soon as traffic flow allows, but no later than the beginning of the next duty day.

**b. Date-Time-Groups.** The Date-Time-Group (DTG) is made up of the day of the month, the time in Universal Coordinated Time (UTC) or Zulu (Z), the calendar month, and the last two digits of the year. For example, if you are in Central Standard Time (CST) at 1100 hours on 3 January 2000, the DTG would be "031700Z JAN 00." The "03" is the day of the month. At 1100 hours in the CST, the time difference is 6 hours (Attachment 7) and is written "1700Z." Then it is followed by the three letter abbreviation of the month and the last two digits of the year, "JAN 00." It is said, "TIME 031700 ZULU January 00."

**NOTE:** If the time is 2000 hours local time with a conversion of +6 to UTC, the time is 0200Z on the next day. This requires that the day of the DTG also be the next day (2000 hours on 3 January 00 makes a DTG of "040200Z JAN 00".)

**3-3 Urgency Signals.** In addition to precedence indicators, there are three URGENCY SIGNALS you should be aware of. They are internationally recognized and require immediate handling and with higher precedence or priority than the preceding Z, O, P, or R, non-emergency precedences. They are:

**a. MAYDAY.** This signal, referred to as the "international distress signal," indicates that a station is threatened by grave and imminent danger to life and property, and requires immediate assistance. In radiotelephone (voice), the word "MAYDAY" will be transmitted three times. After the distress signal is sent all traffic in progress, with the exception of FLASH traffic, will cease and all stations will monitor. Any station in a position to render assistance will do so and all other stations will continue to monitor until the situation is rectified and the frequency is released for normal use.

**b. PAN.** This signal, referred to as the "international urgency signal," indicates the calling station has a very urgent message concerning the safety of a ship, aircraft, or other vehicle and/or the safety of a person or persons. In radiotelephone (voice), the word "PAN" is transmitted three times. All traffic of lower precedence will cease. All stations will monitor and any station that can render assistance will do so. All stations will continue to monitor until the situation is rectified and the frequency is released for normal usage.

**c. SECURITE'.** This signal, referred to as the "international safety signal," indicates that a station is going to transmit a message concerning the safety of navigation or send important meteorological warnings that will, or can, affect ships, aircraft, or persons. All traffic of a lower precedence will cease. All stations will monitor and any station that can render assistance will do so. All stations will continue to monitor until the situation is rectified and the frequency is released for normal usage.

**3-4. The Originator.** The originator of a message should be prudent and economical in the choice of words that will convey the intended meaning. Commonly used conjunctions, prepositions and articles such as "and," "but," "for," "in," "on," "the," "that," etc., should be eliminated from a message unless essential to the meaning of the message.

**3-5. Message Format and Message Construction.** A CAP message (CAPF 105) is divided into three main parts: the message heading, the message text, and the message ending.

**a. The Message Heading/Preamble.** The radio operator, based on information furnished by the originator usually affixes the heading to the message. It can be compared to the information written on the envelope of a letter. This normally would be the return address in the upper left corner, showing who wrote the letter (the originator, or "FROM" line); to whom it is going in the middle of the envelope (the addressee or "TO" line); its urgency (special delivery, priority, 3rd class, etc.) (the "PRECEDENCE"); and the time it was sent (the postmark) (the "TIME" or "DATE-TIME GROUP".) One

difference is the **message number**. This is not required, but may be used during missions or other busy times to reduce confusion. When a message number is not used, the message Precedence and TIME is used for reference to a particular message, as in, "Reference your Priority 312105Z MAR 00." When used, the message number is above the "FROM" line and before the precedence. The order of the message heading or preamble is:

- (1) Message Number (when used) Precedence
- (2) Date-Time-Group
- (3) Originator (from)
- (4) Addressee(s) (action required)
- (5) INFO: Non-Action Addressee(s)

**b. Break or BT.** The separation of the heading and the message text. This is the only use of "BREAK" in CAP communications. "BT" is the shorthand signal, used in digital packet communications, in place of the proword "BREAK."

**c. Message Text.** The text contains the information that the originator desires to convey to the addressee(s). The text is separated from the heading and the ending by the proword *BREAK*. *BREAK* is not considered to be included in the message. It simply serves as a separate word and immediately precedes and follows the text. "REFERENCE," "SUBJECT," and where pertinent, "REDCAP," are to be inserted as the first lines of text, each, separated from the other by a single line-space. Since the "FROM" line contains the originator of the message, there is no need for a signature line in the text of the message so signatures (name, grade, and/or office/duty assignment) are not used. At the end of text, BREAK or BT is used to denote the end of the text.

**d. Operator's Notes.** These notes may consist of such things as prowords *MORE TO FOLLOW* or other pertinent comments concerning the message, and last, the proword *OVER*. If a second message is to immediately follow (limit two, in succession, both of which may be "ROGERed" or acknowledged simultaneously), then, "Message to follow." *OVER* would still be the appropriate end of the first message. The proword *OVER* is always the last word transmitted by the sending station when a reply is expected. The receiving station will acknowledge receipt or obtain needed fills before acknowledging receipt with the proword *ROGER*.

**3-6. Passing/Delivering Message Traffic.** The primary reason for any CAP voice net is the passing of message traffic. There are two kinds of message traffic, **formal (written)** and **informal (conversation or verbal.)** Whether formal or informal, whether it is real or for training purposes, message handling is the reason for the net structure, discipline, and operation. The entire system is dependent on one factor that may or may not take place over the radio waves. Once received, each message must be delivered to all addressees. A message that is not delivered fails the mission and responsibility of the CAP communications system. Every caution must be taken to ensure that messages are delivered in a timely and efficient manner. A checklist for passing message traffic is listed at Attachment 8.

**a. The Receiving Station.**

(1) In the event "fills" or "repeats" are required, the message must NOT be acknowledged, until the receiving station is positive that it has copied what was transmitted, 100%.

(2) "Fills" or "repeats" will be requested of the transmitting station, via the use of the appropriate prowords.

(3) Only AFTER the receiving station believes it has a "carbon copy" of the transmitted message, will it acknowledge receipt of that message or messages, by the directed-use of the proword "ROGER."

**b. Referencing Message(s).** Because there are many messages transmitted by active stations, a referencing system must be used. If used, messages are first identified by their message number and precedence. The reference would be the sending station's call sign and message number. For example, "Reference your message number 147." Without a message number, the reference

is the message precedence and the time (Date-Time-Group.) For example, "Reference your ROUTINE message of 210327Z MAY 00."

**c. Service Message.** In the event that a previously transmitted and acknowledged message has to be corrected, it may only be done through the use of a subsequently prepared and separately numbered formal message. It must include:

(1) The exact same addressee(s) in the FROM and TO lines as in the original message.

(2) Following a blank line space, the words "SERVICE MESSAGE" should be on a separate line.

(3) The first lines of text should fully reference the concerned message. (Precedence and DTG.)

(4) The rest of the text covers the correction(s).

(5) The message is transmitted to the same receiving stations, as the original.

**ATTACHMENT 1 - THE PHONETIC ALPHABET**

THE PHONETIC ALPHABET						
Letter	Word	Pronunciation		Letter	Word	Pronunciation
A	ALPHA	<u>AL-FAH</u>		N	NOVEMBER	<u>NO-VEM-BER</u>
B	BRAVO	<u>BRAH-VOH</u>		O	OSCAR	<u>OSS-CAH</u>
C	CHARLIE	<u>CHAR-LEE</u>		P	PAPA	<u>PAH-PAH</u>
D	DELTA	<u>DELL-TAH</u>		Q	QUEBEC	<u>KEH-BECK</u>
E	ECHO	<u>ECK-OH</u>		R	ROMEO	<u>ROW-ME-OH</u>
F	FOXTROT	<u>FOX-TROT</u>		S	SIERRA	<u>SEE-AIR-RAH</u>
G	GOLF	<u>GOLF</u>		T	TANGO	<u>TANG-GO</u>
H	HOTEL	<u>HOH-TELL</u>		U	UNIFORM	<u>YOU-NEE-FORM</u>
I	INDIA	<u>IN-DEE-AH</u>		V	VICTOR	<u>VIK-TAH</u>
J	JULIET	<u>JEW-LEE-ETT</u>		W	WHISKEY	<u>WISS-KEY</u>
K	KILO	<u>KEY-LOH</u>		X	XRAY	<u>ECKS-RAY</u>
L	LIMA	<u>LEE-MAH</u>		Y	YANKEE	<u>YANG-KEY</u>
M	MIKE	<u>MIKE</u>	Z	ZULU	<u>ZOO-LOO</u>	

**ATTACHMENT 2 - PROWORDS**

<b>Proword</b>	<b>Explanation</b>
<i>AFFIRMATIVE</i>	You are correct, OR, what you have transmitted is correct. Yes.
<i>ALL AFTER</i>	The portion of the message to which I have reference is that portion which follows ____.
<i>ALL BEFORE</i>	The portion of the message to which I have reference is that portion which precedes ____.
<i>BREAK</i>	I hereby indicate the separation of the text from all other portions of this message.
<i>CORRECT</i>	You are correct. That is correct.
<i>CORRECTION</i>	An error has been made in this transmission. Transmission will continue with the last word correctly transmitted.
<i>DISREGARD THIS TRANSMISSION, OUT</i>	This transmission is in error. Disregard it. (This proword will not be used to cancel a message that has been transmitted and received for by the receiving station.)
<i>DO NOT TRANSMIT, OUT</i>	Stations called will not answer this call, receipt for this message, or otherwise transmit regarding this transmission. (When this proword is used, the transmission will always end with the proword "OUT".)
<i>EXEMPT</i>	The addressees immediately following are exempted from the collective call. The addressees following are exempt from receiving this message.
<i>FIGURES</i>	A group of one or more characters, the first of which is a numeral, follows.
<i>FLASH</i>	This message has a precedence of FLASH.
<i>FROM</i>	The originator of the message immediately follows.
<i>GROUPS</i>	The text of this message contains ____ groups or words. (Normally not used in CAP originated messages)
<i>IMMEDIATE</i>	This message has a precedence of IMMEDIATE.
<i>INFO</i>	The addressees immediately following are addressed for information only. No action is required of them.
<i>INITIAL(S)</i>	A group of one or more letters, the first of which is a letter, follows.
<i>I READ BACK</i>	The following is in response to your request to read back.
<i>I SAY AGAIN</i>	I am repeating the transmission, or the portion you need repeated.
<i>I SPELL</i>	I will spell the next word phonetically.
<i>I VERIFY</i>	That which follows has been verified per your request (to be used only as a reply to a VERIFY request.)
<i>MAYDAY</i>	International Distress Signal. Indicates traffic concerning imminent and grave danger to life and property.
<i>MESSAGE FOLLOWS</i>	A message that requires recording follows.
<i>MORE TO FOLLOW</i>	I have more messages, traffic, or information for you.
<i>MORE TO FOLLOW</i>	I have more messages, traffic, or information for you.
<i>NEGATIVE</i>	Not received. No.
<i>NOTHING HEARD</i>	To be used when no reply is received from a call during a net or roll call.

<b>Proword</b>	<b>Explanation</b>
<i>NUMBER</i>	This station message number, in numerals, follows.
<i>OUT</i>	This is the end of my transmission to you and no answer or reply is required or expected.
<i>PAN</i>	International Urgency Signal. Identifies very urgent information concerning the safety of lives and property.
<i>PRIORITY</i>	This message has a precedence of PRIORITY.
<i>REDCAP</i>	Used in the first line of text in a message to signify mission-related traffic.
<i>READ BACK</i>	Repeat this transmission back to me exactly as received.
<i>RELAY (TO)</i>	Transmit this message to all addressees immediately following this proword.
<i>RELAY THROUGH</i>	Relay your message through ____.
<i>ROGER</i>	I have received and understand you last message. (Does NOT mean yes or permission granted.)
<i>ROUTINE</i>	This message has a precedence of ROUTINE.
<i>SAY AGAIN</i>	Repeat the portions of your last transmission I am indicating.
<i>SECURITE'</i>	International Safety Signal. Pronounced SEE CURI TAY'. Identifies urgent information regarding safety of navigation to vessels.
<i>SPEAK SLOWER</i>	Your transmission is too fast. Reduce speed.
<i>THIS IS</i>	This transmission is from the station whose call sign immediately follows.
<i>THIS IS A DIRECTED NET</i>	Used by the Net Control Station (NCS) to establish the type of net being operated as a directed net.
<i>THIS IS A FREE NET</i>	Used by the Net Control Station (NCS) to establish the type of net being operated as a free net.
<i>TIME</i>	The figures that follow are the Date/Time Group (DTG) of this message.
<i>TO</i>	The addressee(s) who are to take action, and to whom this message is to be delivered are as follows.
<i>UNKNOWN STATION</i>	The identity of the station I am trying to contact is unknown (used in place of that station's call sign.)
<i>VERIFY</i>	Verify entire message (or portion indicated) with the originator and send the verified version (used by receiving station.)
<i>WAIT</i>	I must pause for a few seconds. Standby. Do not transmit. Wait for me to continue with my transmission (the proword OUT is not used.)
<i>WAIT OUT</i>	I must pause for more than a few seconds. This contact is terminated until I call you again. The net can continue.
<i>WILCO</i>	I have received, and understood, and will comply. (Note: Since the meaning of the proword ROGER is included, the two prowords are not used together.)
<i>WORD AFTER</i>	The word to which I have reference is that which follows ____.
<i>WORD BEFORE</i>	The word to which I have reference is that which precedes ____.
<i>WORDS TWICE</i>	Communication is difficult. Transmit each word or phrase twice (may be used as a request or a statement of intent.)
<i>WRONG</i>	Your last transmission was incorrect. The correct version is ____.
<i>ZIP</i>	The figures that follow are the postal zip code.



**ATTACHMENT 3 - NUMERALS**

Numeral	Pronunciation	Numeral	Pronunciation
0	<u>ZE</u> -RO	5	<u>FIFE</u>
1	<u>WUN</u>	6	<u>SIX</u>
2	<u>TOO</u>	7	<u>SEV-EN</u>
3	<u>THU-REE</u>	8	<u>AIT</u>
4	<u>FOW-ER</u>	9	<u>NIN-ER</u>

**ATTACHMENT 4 - PUNCTUATION**

Punctuation	Abbreviation
COLON	CLN
COMMA	CMM
DASH	DASH
DECIMAL POINT	DECIMAL POINT
HYPHEN	HYPHEN
PARAGRAPH	PARA
PARENTHESES	PAREN
PERIOD	PD
QUESTION MARK	QUES
QUOTATION	QUOTE/UNQUOTE
SEMICOLON	SMCLN
SLANT	SLANT

**ATTACHMENT 5 - SIGNAL REPORTS**

Report of Signal	Explanation
LOUD	Your signal is very strong.
GOOD	Your signal strength is good.
WEAK	Your signal strength is weak.
VERY WEAK	Your signal strength is very weak
FADING	At times your signal strength fades to such an extent that continuous reception cannot be relied on.

Report of Readability	Explanation
CLEAR	The quality of your transmission is excellent.
READABLE	The quality of your transmission is satisfactory.
UNREADABLE	The quality of your transmission is so bad that I cannot understand you.
DISTORTED	Having trouble understanding you because your signal is distorted.
WITH INTERFERENCE	Having trouble understanding you due to interference.
INTERMITTENT	Having trouble understanding you because your signal is intermittent.

**ATTACHMENT 6 - WING AND REGION CAPFLIGHT CALL SIGN NUMBERS**

<b>Wing</b>	<b>CAPFlight #</b>		<b>Wing</b>	<b>CAPFlight #</b>
Alabama	1		National Capital	25
Alaska	50		Nebraska	26
Arizona	2		Nevada	27
Arkansas	3		New Hampshire	28
California	4		New Jersey	29
Colorado	5		New Mexico	30
Connecticut	6		New York	30
Delaware	7		North Carolina	31
Florida	8		North Dakota	32
Georgia	9		Ohio	33
Hawaii *	51		Oklahoma	34
Idaho	10		Oregon	36
Illinois	11		Pennsylvania	37
Indiana	12		Puerto Rico	52
Iowa	13		Rhode Island	38
Kansas	14		South Carolina	39
Kentucky	15		South Dakota	40
Louisiana	16		Tennessee	41
Maine	17		Texas	42
Maryland	18		Utah	43
Massachusetts	19		Vermont	44
Michigan	20		Virginia	45
Minnesota	21		Washington	46
Mississippi	22		West Virginia	47
Missouri	23		Wisconsin	48
Montana	24		Wyoming	49
<b>Region</b>	<b>CAPFlight #</b>		<b>Other</b>	<b>CAPFlight #</b>
Northeast	91		National Commanders SQ	99
Middle East	92		Congressional Squadron	99
Great Lakes	93			
Southeast	94			
North Central	95			
Southwest	96			
Rocky Mountain	97			
Pacific	98			

\* Hawaii Wing is assigned a different block of call signs per FAA request.

**ATTACHMENT 7 - TIME CONVERSION CHART**

<b>UTC (ZULU)</b>	<b>EASTERN STANDARD</b>	<b>CENTRAL STANDARD</b>	<b>MOUNTAIN STANDARD</b>	<b>PACIFIC STANDARD</b>
0000Z	1900	1800	1700	1600
0100Z	2000	1900	1800	1700
0200Z	2100	2000	1900	1800
0300Z	2200	2100	2000	1900
0400Z	2300	2200	2100	2000
0500Z	2400	2300	2200	2100
0600Z	0100	2400	2300	2200
0700Z	0200	0100	2400	2300
0800Z	0300	0200	0100	2400
0900Z	0400	0300	0200	0100
1000Z	0500	0400	0300	0200
1100Z	0600	0500	0400	0300
1200Z	0700	0600	0500	0400
1300Z	0800	0700	0600	0500
1400Z	0900	0800	0700	0600
1500Z	1000	0900	0800	0700
1600Z	1100	1000	0900	0800
1700Z	1200	1100	1000	0900
1800Z	1300	1200	1100	1000
1900Z	1400	1300	1200	1100
2000Z	1500	1400	1300	1200
2100Z	1600	1500	1400	1300
2200Z	1700	1600	1500	1400
2300Z	1800	1700	1600	1500

**For Daylight Savings Time, subtract one hour from UTC (example 0600 CST = 1200Z, 0600 CDT = 1100Z.)**

**ATTACHMENT 8 - MESSAGE PASSING CHECKLIST**

Message elements in CAP messages will be ordered as follows:

1. The call sign(s) of the station(s) called
2. The proword *THIS IS*
3. The call sign of the sending station (your call sign)
4. The proword *MESSAGE*
5. The proword *NUMBER*, followed by (a) numeral(s), assigned by the originator, indicating the serial number or message number of the message, if used.
6. The precedence (PRIORITY, ROUTINE, etc.).
7. The proword *TIME* followed by the six digit DTG, the proword *ZULU*, the month (three letter abbreviation) and the last two digits of the year (ddhhmmZ MMM YY)
8. The proword *FROM* and the originator's information (office symbol, address, telephone number, etc.).
9. The proword *TO* [action addressee] and the recipient's information (office symbol, address, telephone number, etc.).
10. The proword *INFO* [non-action addressee(s)] and the recipient's information (this element is optional)
11. The proword *GROUPS* (if applicable) with numeral(s) indicating the number of groups in the text of the message (may be used if needed)
12. The proword *BREAK/BT* (to notify the receiving station that this is the end of the heading and the text follows)
13. The text of the message
14. The proword *BREAK/BT* (to notify the receiving station that the text is complete)
15. Any operator notes
16. The proword *OVER*